

# Real-time access for drifting buoy data – Basic instructions

To access real-time data from drifting buoys, please visit the NOAA OSMC ERDDAP webpage at [http://osmc.noaa.gov/erddap/tabledap/OSMC\\_30day.html](http://osmc.noaa.gov/erddap/tabledap/OSMC_30day.html). Here, you will see the list of possible variables. Examples include: date ranges, specific regions, sst data, slp data, etc.

1. To begin, select “Uncheck All.”

ERDDAP  
Easier access to scientific data

ERDDAP > tabledap > Data Access Form

Dataset Title: OSMC 30 day RT data  
Institution: OSMC (Dataset ID: OSMC\_30day)  
Information: Summary | License | FGDC | ISO 19115 | Metadata | Background | Subset | Make a graph

Variable ☐ Check All ☒ Uncheck All

☒ platform\_code (WMO id or ship call sign)  
☒ platform\_type  
☒ country  
☒ time (observation date, UTC)  
☒ latitude (degrees\_north)  
☒ longitude (degrees\_east)  
☒ observation\_depth  
☒ sst (sea surface temperature, Deg C)  
☒ atmp (air temperature, Deg C)  
☒ precip (precipitation, mm)  
☒ ztmp (profile water temperature, Deg C)  
☒ zsal (profile salinity)  
☒ slp (sea level pressure, hPa)  
☒ windsdp (wind speed, m/s)  
☒ winddir (wind from direction, Deg true)  
☒ wvht (sea surface wave significant height, m)  
☒ waterlevel (m)  
☒ clouds (cloud cover, oktas)  
☒ dewpoint (dew point temperature, Deg C)  
☒ uo (eastward sea water velocity, m s-1)  
☒ vo (northward sea water velocity, m s-1)  
☒ wo (upward sea water velocity, m s-1)  
☒ rainfall\_rate (m s-1)  
☒ hur (relative humidity)  
☒ sea\_water\_elec\_conductivity (S m-1)  
☒ sea\_water\_pressure (dbar)  
☒ rids (surface downwelling longwave flux in air, W m-2)  
☒ rds (surface downwelling shortwave flux in air, W m-2)  
☒ waterlevel\_met\_res (meteorological residual tidal elevation, m)  
☒ waterlevel\_wrt\_lcd (tidal elevation WRT local chart datum, m)  
☒ water\_col\_ht (water column height, m)  
☒ wind\_to\_direction (degree)  
☒ lon360 (longitude, degree\_east)

Optional Constraint #1: 2017-08-17T00:00:00Z  
Optional Constraint #2:   
Minimum: -89.0  
Maximum: 89.0

2. Once all boxes are unchecked, within “platform type”, select “DRIFTING BUOYS {GENERIC}” from the pull-down tab on the far right.

ERDDAP  
Easier access to scientific data

ERDDAP > tabledap > Data Access Form

Dataset Title: OSMC 30 day RT data  
Institution: OSMC (Dataset ID: OSMC\_30day)  
Information: Summary | License | FGDC | ISO 19115 | Metadata | Background | Subset | Make a graph

Variable ☐ Check All ☐ Uncheck All

☐ platform\_code (WMO id or Ship call sign)  
☐ platform\_type  
☐ country  
☐ time (observation date, UTC)  
☐ latitude (degrees\_north)  
☐ longitude (degrees\_east)  
☐ observation\_depth  
☐ sst (sea surface temperature, Deg C)  
☐ atmp (air temperature, Deg C)  
☐ precip (precipitation, mm)  
☐ ztmp (profile water temperature, Deg C)  
☐ zsal (profile salinity)  
☐ slp (sea level pressure, hPa)  
☐ windsdp (wind speed, m/s)  
☐ winddir (wind from direction, Deg true)  
☐ wvht (sea surface wave significant height, m)  
☐ waterlevel (m)  
☐ clouds (cloud cover, oktas)  
☐ dewpoint (dew point temperature, Deg C)  
☐ uo (eastward sea water velocity, m s-1)  
☐ vo (northward sea water velocity, m s-1)  
☐ wo (upward sea water velocity, m s-1)  
☐ rainfall\_rate (m s-1)  
☐ hur (relative humidity)  
☐ sea\_water\_elec\_conductivity (S m-1)  
☐ sea\_water\_pressure (dbar)  
☐ rids (surface downwelling longwave flux in air, W m-2)  
☐ rds (surface downwelling shortwave flux in air, W m-2)  
☐ waterlevel\_met\_res (meteorological residual tidal elevation, m)  
☐ waterlevel\_wrt\_lcd (tidal elevation WRT local chart datum, m)  
☐ water\_col\_ht (water column height, m)  
☐ wind\_to\_direction (degree)  
☐ lon360 (longitude, degree\_east)

Optional Constraint #1: 2017-08-17T00:00:00Z  
Optional Constraint #2:   
Minimum: -89.0  
Maximum: 89.0

Platform Type Dropdown Options:  
"C-MAN WEATHER STATIONS"  
"CLIMATE REFERENCE MOORED BUOYS"  
"DRIFTING BUOYS {GENERIC}"  
"GLOISS"  
"ICE BUOYS"  
"MOORED BUOYS {GENERIC}"  
"PROFILING FLOATS AND GLIDERS {GENERIC}"  
"RESEARCH"  
"SHIPS"  
"SHIPS {GENERIC}"  
"SHORE AND BOTTOM STATIONS {GENERIC}"  
"TIDE GAUGE STATIONS {GENERIC}"  
"TROPICAL MOORED BUOYS"  
"TSUNAMI WARNING STATIONS"  
"UNKNOWN"  
"VOLUNTEER OBSERVING SHIPS"  
"VOLUNTEER OBSERVING SHIPS {GENERIC}"  
"VOSCLIM"  
"WEATHER AND OCEAN OBS"  
"WEATHER BUOYS"  
"WEATHER OBS"

3. After selecting “DRIFTING BUOYS” within “platform\_type”, next select the desired variable(s) . For example, if you are interested in time, latitude, longitude, SST, and SLP, you would check the following selections:

The screenshot shows the ERDDAP Data Access Form for the dataset "OSMC 30 day RT data". The "platform\_type" is set to "DRIFTING BUOYS". The "Variable" list on the left includes various oceanographic parameters. Red arrows point to the following checked variables: "time (observation date, UTC)", "latitude (degrees\_north)", "longitude (degrees\_east)", "sst (sea surface temperature, Deg C)", and "slp (sea level pressure, hPa)". A red box with the text "Select desired variables." points to the variable list.



**\*\*Please note: If you desire specific coordinates, and/or a time parameter, you must enter these values in the “Optional Constraint” boxes to right of each field. \*\***

4. Once all desired variables have been chosen, for best output results, under “Server-side Functions”, order variables by “platform\_code” and “time”. In doing so, the output will be displayed by WMO number and time (chronologically).

The screenshot shows the ERDDAP Data Access Form with the same variable selections as the previous image. In the "Server-side Functions" section, the "orderBy" dropdown is set to "platform\_code" and the "time" dropdown is set to "time". Red arrows point to these two dropdowns. The "File type" is set to ".htmlTable". The "Submit" button is at the bottom.














































5. To select the desired output format, select from the options within “File type”. Format options include comma separated (.csv), MATLAB (.mat), PDF (.pdf), ASCII (.asc), etc.


**ERDDAP > tabledap > Data Access Form**


Dataset Title: **OSMC 30 day RT data**  

Institution: OSMC (Dataset ID: OSMC\_30day)



Information: [Summary](#) | [License](#) | [FGDC](#) | [ISO 19115](#) | [Metadata](#) | [Background](#) | [Subset](#) | [Make a graph](#)


Variable 	Optional Constraint #1 	Optional Constraint #2 	Minimum  or a List of Values 	Maximum 
<input type="checkbox"/> platform_code (WMO id or Ship call sign) 	>= <input type="text"/>	<= <input type="text"/>		
<input checked="" type="checkbox"/> platform_type 	= <input type="text" value="DRIFTING BUOYS (GENE"/> 	<= <input type="text"/>	<input type="text" value="DRIFTING BUOYS (GENERIC)"/> 	
<input type="checkbox"/> country 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> time (observation date, UTC) 	>= <input type="text"/>	<= <input type="text"/>		
<input checked="" type="checkbox"/> latitude (degrees_north) 	>= <input type="text" value="20"/> 	<= <input type="text" value="30"/> 	-89.0	89.0
<input checked="" type="checkbox"/> longitude (degrees_east) 	>= <input type="text" value="-70"/> 	<= <input type="text" value="-60"/> 	-180.0	180.0
<input type="checkbox"/> observation_depth 	>= <input type="text"/>	<= <input type="text"/>		
<input checked="" type="checkbox"/> sst (sea surface temperature, Deg C) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> atmp (air temperature, Deg C) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> precip (precipitation, mm) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> ztmp (profile water temperature, Deg C) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> zsal (profile salinity) 	>= <input type="text"/>	<= <input type="text"/>		
<input checked="" type="checkbox"/> slp (sea level pressure, hPa) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> windsdp (wind speed, m/s) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> winddir (wind from direction, Deg true) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> wvht (sea surface wave significant height, m) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> waterlevel (m) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> clouds (cloud cover, oktas) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> dewpoint (dew point temperature, Deg C) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> uo (eastward sea water velocity, m s-1) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> vo (northward sea water velocity, m s-1) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> wo (upward sea water velocity, m s-1) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> rainfall_rate (m s-1) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> hur (relative humidity) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> sea_water_elec_conductivity (S m-1) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> sea_water_pressure (dbar) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> rlds (surface downwelling longwave flux in air, W m-2) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> rsds (surface downwelling shortwave flux in air, W m-2) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> waterlevel_met_res (meteorological residual tidal elevation, m) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> waterlevel_wrt_lod (tidal elevation WRT local chart datum, m) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> water_col_ht (water column height, m) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> wind_to_direction (degree) 	>= <input type="text"/>	<= <input type="text"/>		
<input type="checkbox"/> lon360 (longitude, degree_east) 	>= <input type="text"/>	<= <input type="text"/>		

**Server-side Functions** 

☐ distinct() 

orderBy:  | time

**File type:**    - Download longitude,latitude,otherColumns data as a GeoJSON .json file. [more info](#)

Just generate the URL:  [Documentation](#) / [Bypass this form](#) 

**Submit** (Please be patient. It may take a while to get the data.)

6. Once you have entered the desired information and chosen the output file type, click “Submit” to receive the data.